

KHARTOUM – GARDEN CITY

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As most cities in the world have been set up at river banks and sea shores, even Khartoum is located at the confluence of the Blue and White Nile. Beside the regular floods the waters of the two Niles provide all the necessities for live as:
Water, soil and silt as fertilizer, transport and finally the pleasant view and evenly breezes while sitting at the river bank.



Today's situation is marked by uncontrolled growth and settlements. On one hand the river banks provide cheap land, on the other hand the value of lot's with unblocked views and access to the river is high. Cities around the world face similar problems of uncontrolled urbanisation.

Most valuable lands are taken by infrastructure projects as roads and railways, industrial settings and commercial complexes. Once these cities reach a certain wealth, their citizen's leave the urban centres and move to the outer skirts and close villages.

Which citizen is not searching permanently for a tranquil and pollution free space for his living?

Citizens would highly expect these quality signs in close proximity, in walking distance!

Cities with a central park, or central green spine; as created by rivers and wadi's may provide these factors easily.

Khartoum is in the luxurious situation that the river banks and sites are not yet fully occupied by uncontrolled constructions. It is time to create a sustainable vision for the cities future green belts which might one day benefit to all its inhabitants.

1. Give the river the space it needs during floods – It will take it anyway.
2. Provide access for all people at any time to the safe river banks and
3. Develop a green corridor and parkscape for the wealth of the city.



Following two samples of today's development at the Arabian Peninsula will show how such a task could be assessed:

- I. Wadi Hanifah Restoration Project in Riyadh and
- II. Waterfront Development in Yanbu at the Red Sea

Wadi Hanifah Restoration Project in Riyadh

The similarities between Khartoum and Riyadh will become visible when looking at both rivers from a Satellite: The Nile valley and Wadi Hanifah look astonishingly alike.

Riyadh has been founded at the edge of the 120km long Wadi Hanifah. The Wadi provides natural setting for Date Palm groves and gardens.

Due to the incredible population growth in recent years there are around 4 Million Inhabitants today and an assumed 10 Mill. people until 2022.

The Wadi itself was continuously degraded from a former natural resource, providing food and shelter to an obstacle for infrastructure and construction sites. More than a decade it was misused as a:



- Illegal and unrestricted dumping site for construction rubble and waste
- Material source/ quarries for stone, rock and gravel
- Incredible pollution by illegal and uncontrolled waste dump (private and industrial) eg.: brick plant, sewage treatment plant, hospital waste ...
- Uncontrolled traffic
- Uncontrolled settlements

The Client together with international Consultants and Landscape Architects developed a vision for this unique space. Names like “Wadi Hanifah wetlands”, “Riyadh Lake District” or “Central Park of Riyadh” describe the future of this project.

Riyadh is the only city worldwide which is reconstructing a “river” from its beginning to the end. The aim is a sustainable ecosystem which serves both men and nature.

The key principle for the Wadi Development Plan sees the Wadi as a clean, green, safe and healthy ecosystem.

This vision has won international recognition and has been presented to the United Nations in New York.

Today works are progressing at all stages; the first 3 stages have been reconstructed.

Almost 1.25 Million cbm of construction rubble has been removed during Phase 1 works.

The Wadi, close to the centre of the city has already become a clean and green space. It will provide resting and relaxation space for the people of Riyadh.



The main visions for the Wadi restoration scheme are:

- Reconstruction of the run-off profile (reduce flooding)
- Treatment of the waters by a bio-remediation plant
- Greening of the area by autochthon palms, trees, shrubs and Grasses
- Restoration of the natural landscape
- Construction of Gardens, trails, picnic and other recreational areas eg.: all the 120 km wadi length a trail for people to be build.

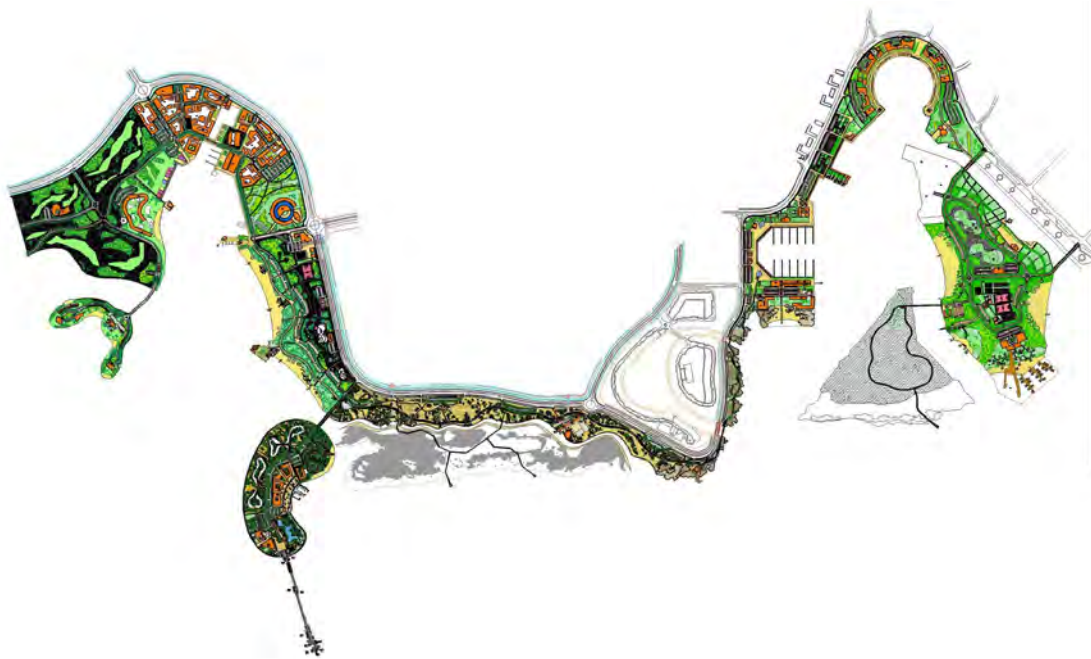
The project has been financed by the public Authority and different Ministries. Side effects of these investments are already as follows:

- Increase in land prices along the Wadi edges
- Eager interest of private investors to set up business within the precinct of the Wadi
- Awareness of the society. The public follows each step of the development with close interest.

Waterfront Development in Yanbu

The new waterfront development in Yanbu is located at the Red Sea coast of Saudi Arabia, 350 km North of Jeddah.

The Client, the Royal Commission of Jubail and Yanbu, intended to develop a 12 km long and 550 ha area seafront into an urban and touristic land development.



As Yanbu itself is a quite small urban area and the RC is a profit orientated Authority the question arose how to finance such a huge development.

The Authority commissioned international Consultants to work out a master plan and afterwards the complete design.

The final design consists of

- Public and private beaches
- Sport facilities
- Recreational zones,
- Promenades and walkways
- Roads, Corniche and Parking
- Restaurants, hotels, amenities and kiosks

These ideas have been categorised to either the private or public sector.

In brief:

The Client provides the overall idea, concept and strategy. He will build roads, infrastructure and all public constructions like mountains, beach protection, fishing piers and others.

The private investors are responsible for any kind of development defined in the “Investor packages”. Within these “Investor packages” all investors have to follow the design criteria as detailed.



“Investor packages” for example specify the type of business, dimensions, materials and colour of edifices, general layout of roads, walkways, green spaces and so on.

Prior of commencement of works the Investor has to submit a detailed construction drawing for approval to the Client. Only this makes sure that the overall scheme will be followed.

This kind of collaboration between the public Authority and the private sector is known as “Private Public Partnership” (PPP). This scheme assists the entrepreneurs in following their business. At the same time it guaranties that the overall frame of public interest will be achieved.

At this point it shall be mentioned, that within urban conurbations landscaped areas are not somehow lost spaces. Research in different cities of the world has shown that green spaces as parks, gardens, promenades etc. do increase the value of adjoining lots. People, both poor and rich, prefer to settle close to Parks, seashores and river banks!

For Khartoum this could imply:

1. To set up a Green Space Plan which will focus on all river banks, islands and existing green spaces. This plan shall indicate all existing resources and future possible developments.
2. The worked-out vision of the Green Space Plan has to be detailed in regard to PPP.
3. Investor packages are the result of such a program and could be brought to marketing in short time.

The result could be a thriving and sustainable city along the Nile banks;
It could be the new "Green urban waterfront of Khartoum",



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